



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत संचार विकास प्रभाग
Power Communication Development Division

CEA Case No. : MRA-1216		
Induced Voltage (IV) calculation for PTCC proposal of 220 kV D/C line from Jejuri (400 kV) S/s to Lonand (220 kV) S/s by laying new section from Jejuri (400 kV) S/s to location No. 28 of existing 220 kV line from Jejuri (220 kV) S/s to Lonand (220 kV) S/s (7.24 km) - regd.		
S. No	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-594/00924	08.02.2023
(ii)	MSETCL: Email	05.09.2023
(iii)	BSNL: IC/MBI/PTCC/MRA-2581/03	02.05.2023
(iv)	Central Railway: N.153/PTCC/220kV/MAH-829	27.02.2023
(v)	Defense: B/46937/Sigs 7(b)/3240	31.07.2023

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on communication circuits of BSNL and Central Railway with respect to details furnished vide above references (iii) & (iv) respectively have been computed. The voltages likely to be induced on paralleling communication circuits of BSNL and Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I & II respectively. The screening factors as applicable have been considered. Defense has issued No Objection Certificate (NOC) vide above reference (v) (copy enclosed as Annexure-III). EPR details verification is not required as substations are existing.

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

emt
(मन.ज.वि.) 10.23
Director

To,

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 st floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054	
2.	General Manager (S&T)	Central Railway, O/o PCSTE, S&T Dept., 3 rd floor, Annexe Building, Chhatrapati Shivaji Maharaj Terminus, Mumbai - 400001	
3.	Superintending Engineer (Project Schemes)	MSETCL, O/o Superintending Engineer (Project Schemes Dept.), Prakashganga, P. No. C19, #E, BKC, Bandra (East), Mumbai - 400051	Copy for information

ANNEXURE-I

CEA Case No.: MRA-1216 Name of the Power line: 220 kV D/C line from 400 kV Jejuri S/s to loc. no. 28 of existing 220 kV Jejuri – Lonand line (to provide direct source to 220 kV Lonand S/s and 220 kV Baramati S/s from 400 kV Jejuri S/s)			Map Scale : 1 cm= 500 m Total Length : 7.24 km S.R. Value : 10000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
BSNL Letter No: IC/MBI/PTCC/MRA-2581/03 Date: 02.05.2023					
1	Jejuri				IV less than 430 V
	400 Pr X 2 Nos				
2	Walha				
	200 Pr X 1 Nos				

ANNEXURE-II

CEA Case No.: MRA-1216 Name of the Power line: 220 kV D/C line from 400 kV Jejuri S/s to loc. no. 28 of existing 220 kV Jejuri – Lonand line (to provide direct source to 220 kV Lonand S/s and 220 kV Baramati S/s from 400 kV Jejuri S/s)			Map Scale : 1 cm= 500 m Total Length : 7.24 km S.R. Value : 10000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
Central Railway Letter No: N.153/PTCC/220kV/MAH-829 Date: 27.02.2023					
1	Rajewadi - Jejuri	0.4	0.0001	26627	3
2	Jejuri - Daundaj	6.8	0.0012	19167	23
3	Daundaj - Walha	Out of parallelism			0
4	Walha – Nira				0

I/30827/2023

Tele : 23019746

File No.CEA-PS-17-11(12)/41/2023-PCD Division

Directorate General of Signals

Signals 7

General Staff Branch

Integrated HQ of MoD (Army)

DHQ PO, New Delhi - 110011

MRA - 1216

B/46937/Sigs 7(b)/3240/

31 Jul 2023

Office of the Superintending Engineer,
Projects Schemes Department
Maharashtra State Electricity Transmission Co Ltd
"Prakashganga", Plot No C-19, 'E' Block,
Bandra - Kurla Complex, Bandra (East),
Mumbai-400051

PTCC PROPOSAL FOR 220KV DC LINE FROM 400KV JEJURI S/S TO LOC. NO. 28 OF EXISTING 220KV JEJURI-LONAND LINE (TO PROVIDE DIRECT SOURCE TO 220KV LONAND S/S AND 220KV BARAMATI S/S FROM 400KV JEJURI S/S), LENGTH=7.24KMS

1. Refer your letter No MSETCL/CO/PS/PTCC/In/B-594/No 00924 dt 08 Feb 2023 (copy att).
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheets received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(SP Choyal)

Lieutenant Colonel

General Staff Officer Grade 1 (Communication)

for Additional Director General (Telecommunication)

Enclosures : As above

Copy to :-

The Director (PTCC), CEA
Power Communication Development Division
NRPC Complex, 18-A Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi - 110016

- for information

The DET(PTCC), Northern Zone
Bharat Sanchar Nigam Limited
O/o PGM (North), QA & Inspection Circle,
D-Tax Building, Eastern Court, Janpath
New Delhi-110001

Central Electricity Authority
PCD Division

Diary No. 713
Date 31/7/23

Dxt (PCD)
31/7/23

Sh Atishay, DD
Xen
ST8

PPU-37414
T615
Sh. Prateek